



UNITED STATES PATENT AND TRADEMARK OFFICE

54

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,775	06/18/2001	Thanh T. Tran	1981-00700 JMH	2993

23505 7590 08/25/2005

CONLEY ROSE, P.C.

P. O. BOX 3267

HOUSTON, TX 77253-3267

EXAMINER

SHANG, ANNAN Q

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/883,775

Applicant(s)

TRAN ET AL.

Examiner

Annan Q. Shang

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06/18/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 3-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Goddard (6,684,240)** in view of **Zigmond et al (6,571,392)**.

As to claim 1, note the **Goddard** reference figures 1-2 and 6, discloses an information appliance implementing content control systems and further discloses a set top box (STB 200, fig. 2):

a host system (Processing System 602/Mem-604/AuxMem-605/NetInt-606/AuxProS-608/DisplaySys-612 'ProSystem' 602-612, fig. 6 and col. 12, lines 26-52);

a universal control logic (Input/Output System 'I/O-S' 616, which interfaces to devices and other user controls via Control Panel 202, col. 13, line 51-col. 14, line 1+) coupled to the host system (ProSystem 602-608) via bus (System bus 'Bus' 610), note that I/O-S-616 also comprises one or more controllers or adapters (col. 13, lines 51-54);

a plurality of input controls (I/O Device1-N 'I/O-D1-N,' col. 13, lines 34-37, line 54-col. 14, line 3 and Control Panel 'CP' 202 of fig. 2, col. 5, lines 17-33) coupled to the universal control logic (I/O-S-616), note that I/O-D1-N RF communication adapters, keyboard, mouse, touchpad, touch screen, etc.; and

a display (Display 'DS' 614, col. col. 13, lines 33-41) coupled to the universal control logic (I/O-S-616); and the universal control logic (I/O-S-616), the input controls (I/O-D1-N) and the display (DS 612/614) are located outside the shielded enclosure (col. 5, lines 21-29);

where the host system (ProSystem 602-612) transmits data over Bus 610 to universal control logic (I/O-S-616) and the universal control logic and the universal control logic provides the data to the display to be shown to a user (col. 4, lines 31-65, col. 5, lines 57-64, col. 12, lines 61 and col. 13, lines 38-col. 14, line 3).

Goddard fails to explicitly teach where the host system or ProSystem 602-612 is contained within a shielded enclosure.

However, note the **Zigmond** reference figures 1, 4 and 7 discloses TV receiver or set top receiver 201, where the host system is a personal computer 'PC' 720 contained within a shielded enclosure with various controls and displays outside the PC (col. 4, line 64-col. 5, line 5 and col. 11, lines 24-60).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Zigmond into the system of Goddard to provide a shielded enclosure to protect the various processing components of the receiver.

As to claim 3, Goddard further discloses where the universal control logic comprises a hub, bus interface and a microcontroller, the bus interface coupled to the hub and the controller (col. 13, line 51-col. 14, line 3).

As to claim, Goddard further discloses where the bus comprises a universal serial bus (col. 12, lines 45-61).

As to claim 5, Goddard further discloses where a communication unit coupled to the universal control logic, which sends and receives information between the STB and other devices (col. 12, lines 13-20 and col. 13, lines 51+).

As to claim 6, Goddard further discloses where the communication unit comprises an antenna and transceiver, and where the transceiver is coupled to the antenna and the universal control logic (col. 12, lines 13-20 and col. 13, lines 51+).

As to claims 7-8, Goddard further discloses where the microcontroller includes a status flag bit associated with each input control, and the microcontroller sets a status flag when the associated input control is activated and where the universal control includes an interrupt bit that is polled by the host system over the bus (col. 12, lines 40-67 and col. 13, line 51-col. 14, line 3).

As to claims 9-10, the claimed "an electronics devices, comprising..." is composed of the same structural elements as previously rejected claim 1.

Claims 11-12 are met as previously discussed with respect to claim 7-8.

As to claim 13, Goddard further discloses where the host system sends commands to the universal control logic (UCL) over the bus and the commands include a command identifier, and the UCL reads the command identifier to determine the type of command (col. 12, lines 40-67 and col. 13, line 51-col. 14, line 3).

As to claim 14, Goddard further discloses where the command identifier comprises a command selected from the group consisting of a request for universal

control logic to indicate the status of input controls and a command for the UCL to show information on the display (col. 12, lines 40-67 and col. 13, line 51-col. 14, line 3).

As to claim 15, Goddard further discloses where the inputs controls, includes a volume control providing digital inputs to the UCL (col. 5, lines 15-25).

As to claim 16, Goddard further discloses where the host system (ProSystem 602-612) includes interfaces to a speaker and a television monitor, where the host system responds to an activation of the volume control by changing the volume level provided to the speaker (col. 12, lines 26-50 and col. 13, line 51-col. 14, line 3).

4. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Goddard (6,684,240)** in view of **Zigmond et al (6,571,392)** as applied to claim 1 above, and further in view of **Li et al (6,026,168)**.

As to claim 2, Goddard as modified by Zigmond, teach where the input controls, includes a digital volume, but fail to explicitly teach a digital volume knob.

However, note the **Li** reference figure 11 discloses a signal regulator for audio/video receiver and further discloses a digital volume knob 180 (col. 12, lines 11-48).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Li into the system of Goddard as modified by Zigmond to provide rotational and greater control over selection and other operations, for the user, than external button(s).

5. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Goddard (6,684,240)** in view of **Zigmond et al (6,571,392)** as applied to claim 16 above, and further in view of **Bell et al (5,937,038)**.

As to claims 17-18, Goddard as modified by Zigmond, teach where the host system provides volume level information to the universal which users the volume level information, but fail to explicitly show indication of the volume level on the display and to show a graphical representation of the volume level on the display.

However, note the **Bell** reference figures 1 and 3, discloses a set top unit which indicates the volume level and shows a graphical representation of the volume level on STB display 90 (col. 4, line 65-col. 5, line 9 and col. 11, lines 25-49).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Bell into the system of Goddard as modified by Zigmond to provide a visual or graphical display of the volume level on the STB display to enable the user to visually see the volume level and adjust the volume accordingly.

6. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Goddard (6,684,240)** in view of **Bell et al (5,937,038)** as applied to claim 17 above, and further in view of **Banker et al (5,477,262)**.

As to claims 19-20, Goddard as modified by Bell, where the host provides a signal to the TV monitor, indicative of a graphical representation of the volume level to the interface.

However, note the **Banker** reference figures 3 and 6C discloses method and apparatus for providing an on-screen user interface for a subscription or cable television terminal (fig. 3 and col. 10, lines 61-64) which provides graphical representation of volume level to TV display 308 (figs. 6C and col. 19, lines 8-47).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Banker into the system of Goddard as modified Bell to provide a graphical representation of the volume on a large display to visual indicate to the user the volume level and also enable easier operation of the function keys or buttons of the remote controller.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Horiwitz et al (6,785,901) disclose altering locks on programming content.

Sgambati (5,606,443) discloses control circuit for entertainment system demonstration.

Kishi et al (5,506,578) disclose volume control of aural guidance of vehicle route guidance apparatus.

Wehmeyer et al (5,543,857) disclose graphical menu for a television receiver.

Bacon (5,054,071) disclose volume control for optimum television stereo separation.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at **866-217-9197 (toll-free)**.



Annan Q. Shang.



CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2300